ABSTRACT

An optical tracking assembly for an optical mouse includes a light source, an optical sensor chip, and an integral optics assembly. The integral optics assembly includes lenses and alignment features receiving the light source. The alignment features center the light source to the lenses and control a distance the light source is placed away from a navigation surface that reflects light onto the optical sensor chip. The lenses may include (1) collimating lenses for collimating light from the light source along a first optical axis to the navigation surface, and (2) imaging lenses for imaging reflected light from the navigation surface along a second optical axis to the optical sensor chip.